



- Universal 90-264VAC Input
- High Efficiency
- Improved EMI Performance
- 5656VDC Isolation
- Single, Dual and Triple Outputs
- UL60601-1, EN60601-1 & IEC60601-1



Model Number	Output Voltage	Output Amps FL (peak)	Ripple/Noise	Efficiency
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#### SINGLE OUTPUT - PCB Mount

ESMA-5000	3.3 VDC	1.25A (1.56A)	165mV pk-pk	60%
ESMA-5001	5 VDC	1A (1.5A)	100mV pk-pk	70%
ESMA-5022	9 VDC	0.55 (0.82)	90mV pk-pk	70%
ESMA-5002	12 VDC	0.42A (0.63A)	120mV pk-pk	73%
ESMA-5003	15 VDC	0.33A (0.5A)	150mV pk-pk	74%
ESMA-5018	18 VDC	0.27 (0.4A)	180mV pk-pk	75%
ESMA-5005	24VDC	0.23A (0.35A)	240mV pk-pk	76%

#### SINGLE OUTPUT - Chassis Mount

ESMC-5000	3.3 VDC	1.25A (1.56A)	165mV pk-pk	60%
ESMC-5001	5 VDC	1A (1.5A)	100mV pk-pk	70%
ESMC-5022	9 VDC	0.55 (0.82)	90mV pk-pk	70%
ESMC-5002	12 VDC	0.42A (0.63A)	120mV pk-pk	73%
ESMC-5003	15VDC	0.33A (0.5A)	150mV pk-pk	74%
ESMC-5018	18 VDC	0.27 (0.4A)	180mV pk-pk	75%
ESMC-5005	24VDC	0.23A (0.35A)	240mV pk-pk	76%

#### SINGLE OUTPUT - DIN Rail Mount

ESMC-5000/DRL	3.3 VDC	1.25A (1.56A)	165mV pk-pk	60%
ESMC-5001/DRL	5 VDC	1A (1.5A)	100mV pk-pk	70%
ESMC-5022/DRL	9 VDC	0.55 (0.82)	90mV pk-pk	70%
ESMC-5002/DRL	12 VDC	0.42A (0.63A)	120mV pk-pk	73%
ESMC-5003/DRL	15VDC	0.33A (0.5A)	150mV pk-pk	74%
ESMC-5018/DRL	18 VDC	0.27 (0.4A)	180mV pk-pk	75%
ESMC-5005/DRL	24VDC	0.23A (0.35A)	240mV pk-pk	76%



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Model Number	Output Voltage	Output Amps FL (peak)	Ripple/Noise	Efficiency
<b>DUAL OUTPUT - PCB Mount</b>				
EDMA-5006	±12 VDC	±0.21A (±0.26A)	±100 mV pk-pk	71%
EDMA-5007	±15 VDC	±0.17A (±0.21A)	±100 mV pk-pk	71%
<b>DUAL OUTPUT - Chassis Mount</b>				
EDMC-5006	±12 VDC	±0.21A (±0.26A)	±100 mV pk-pk	71%
EDMC-5007	±15 VDC	±0.17A (±0.21A)	±100 mV pk-pk	71%
<b>DUAL OUTPUT - DIN Rail Mount</b>				
EDMC-5006/DRL	±12 VDC	±0.21A (±0.26A)	±100 mV pk-pk	71%
EDMC-5007/DRL	±15 VDC	±0.17A (±0.21A)	±100 mV pk-pk	71%
<b>TRIPLE OUTPUT - PCB Mount</b>				
ETMA-5009	5 ±12 VDC	0.53 ±0.1 A / 0.6 ±0.1 A	50 ±75 mV pk-pk	63%
ETMA-5011	5 ±15 VDC	0.41 ±0.1 A / 0.45 ±0.1 A	50 ±75 mV pk-pk	61%
<b>TRIPLE OUTPUT - Chassis Mount</b>				
ETMC-5009	5 ±12 VDC	0.53 ±0.1 A / 0.6 ±0.1 A	50 ±75 mV pk-pk	63%
ETMC-5011	5 ±15 VDC	0.41 ±0.1 A / 0.45 ±0.1 A	50 ±75 mV pk-pk	61%
<b>TRIPLE OUTPUT - DIN Rail Mount</b>				
ETMC-5009/DRL	5 ±12 VDC	0.53 ±0.1 A / 0.6 ±0.1 A	50 ±75 mV pk-pk	63%
ETMC-5011/DRL	5 ±15 VDC	0.41 ±0.1 A / 0.45 ±0.1 A	50 ±75 mV pk-pk	61%



INPUT SPECIFICATIONS

Table with 2 columns: Input Voltage Range, Frequency Range, Inrush Current, Leakage Current and their respective values.

OUTPUT SPECIFICATIONS

Table with 2 columns: Voltage and Current, Load Regulation, Line Regulation, Cross Regulation, Preset Accuracy, Temperature Coefficient, Ripple/Noise, Over Voltage Protection, Over Temp. Protection, Short Circuit Protection, Hold Up Time and their respective values.

GENERAL SPECIFICATIONS

Table with 2 columns: Isolation, Efficiency, Switching Frequency, Safety, EMC and their respective values.

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

\* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability.

PHYSICAL SPECIFICATIONS

Table with 3 columns: Size (PCB Mount, Chassis Mount, Din Rail), Case Material, Construction, Weight (PCB / CHA, Din Rail) and their respective values.

ENVIRONMENTAL SPECIFICATIONS

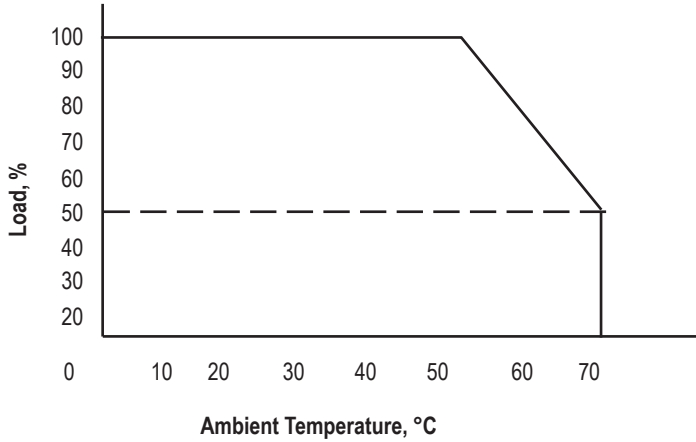
Table with 2 columns: Oper. Temperature, Storage Temperature, Relative Humidity, EMC / EMI, MTBF and their respective values.

NOTES

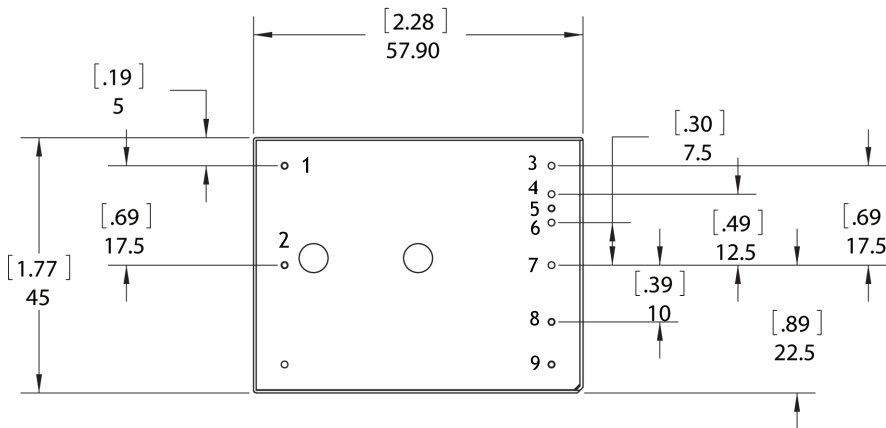
- 1. All measurements should be made directly at the terminals of the power supply.
2. Ripple and Noise depend upon output voltage as specified per particular model.
3. Short Circuit Protection is self-recovering when overcurrent condition is removed.
4. Isolation for up to 1minute duration.
5. Specified for free-air convection cooling.
6. Minimum load is NOT required for proper operation.
7. Load regulation measured from 20% to FL.
8. Line regulation measured from 90VAC 264VAC.
9. Preset accuracy measured at nominal load, 120 VAC input.
10. O/P noise measured directly at pins/terminals at nom. load, 0.1uF bypass, pk-pk @20MHz bandwidth.
11. Cross Reg-Triples: Measured at nom. load with the 5V output varied between 60% and 100% of nom. load.
12. 100% Production Tested.

Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

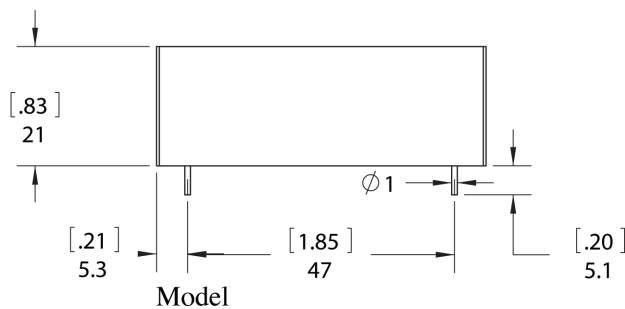
### OUTPUT DERATING CURVE



### MECHANICAL DIMENSIONS



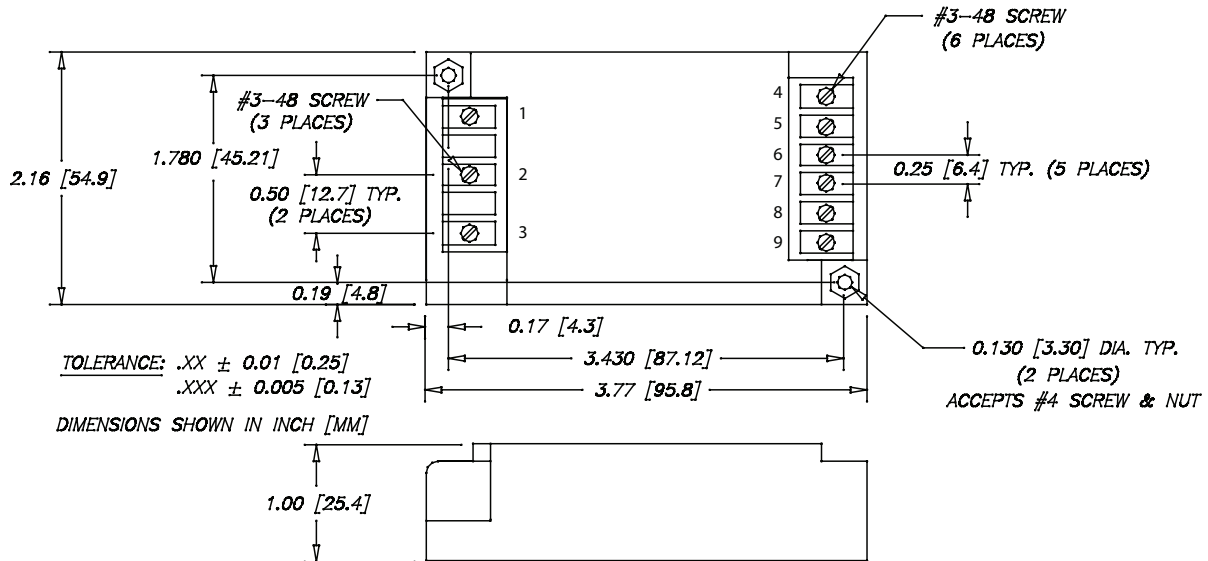
PIN-OUT VIEWED FROM BOTTOM



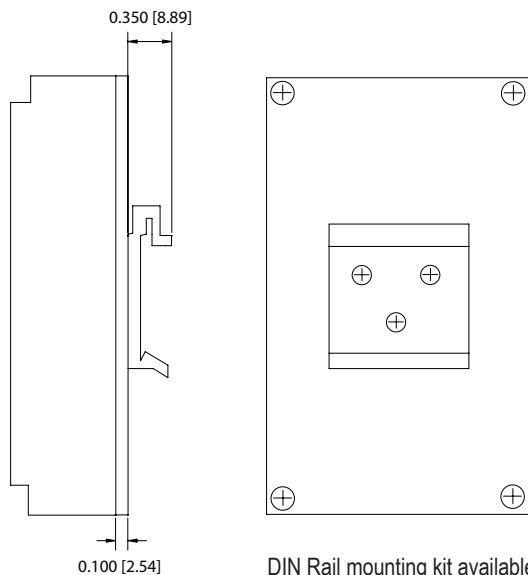
#### Model

Type / Pin#	Single	Dual	Dual (5008)	Triple
1	ACL	ACL	ACL	ACL
2	ACN	ACN	ACN	ACN
3	No Pin	No Pin	No Pin	+Vout
4	No Pin	No Pin	No Pin	Com
5	+Vout	+Vout	+12V	No Pin
6	No Pin	No Pin	No Pin	-Vout
7	No Pin	Com	+5Vout	+5Vout
8	-Vout	-Vout	Com	+5VRTN
9	No Pin	No Pin	No Pin	No Pin

### MECHANICAL DIMENSIONS - CHASSIS MOUNT



### MECHANICAL DIMENSIONS - DIN RAIL



DIN Rail mounting kit available for Chassis-mount modules, specify part # M-DRL-01. Kit includes mounting plate, DIN Rail clip and assembly hardware.

Model Type / Pin#	Single	Dual	Dual (5008)	Triple
1	ACN	ACN	ACN	ACN
2	N/C	N/C	N/C	N/C
3	ACL	ACL	ACL	ACL
4	N/C	N/C	N/C	N/C
5	-Vout	-Vout	Com	+5VRTN
6	-Vout	Com	Com	+5Vout
7	+Vout	Com	+5V	-Vout
8	+Vout	+Vout	+12V	Com
9	N/C	N/C	N/C	+Vout